

# Welcome to the

## **JEA** Awards Meeting

**September 28, 2023, 10:00 AM EST**

You have been joined to the meeting with your **audio muted** by default.

At the designated public comment time we will provide opportunity for you to unmute to speak.

During the meeting, public comments received via e-mail regarding any matter on the agenda for consideration will be read out. Per the Public Notice Agenda posted on [JEA.com](http://JEA.com), public comments by e-mail must be received no later than 9:00 a.m. on the day of the meeting to be read during the public comment portion of the meeting.

Please contact **Aileen Cruz** by telephone at **(904) 776-1911** or by email at **[cruza@jea.com](mailto:cruza@jea.com)** if you experience any technical difficulties during the meeting.

**JEA Awards Agenda  
September 28, 2023  
225 North Pearl St., Jacksonville, FL 32202 - Hydrangea Room 1st Floor**

[Teams Meeting Info](#)

**Consent Agenda**

The Chief Procurement Officer offers the following items for the JEA Awards Consent Agenda. Any item may be moved from the Consent Agenda to the Regular Agenda by a committee member asking that the item be considered separately. **All items on the Consent agenda have been approved by OGC, Budget and the Business Unit Vice President and Chief.** The posting of this agenda serves as an official notice of JEA's intended decision for all recommended actions for **Formal Purchases** as defined by **Section 3-101 of the JEA Procurement Code**. Please refer to JEA's Procurement Code, if you wish to protest any of these items.

Award #	Type of Award	Solicitation # & Short Description/Title	VP	Awardee	Funding Source	Award Amount	Original Award Amount	New Not-to-Exceed	Amendments	Term	JSEB Participation (Y/N) If Y, then list company name(s) (% , \$ - awarded)
1	Minutes	Minutes from 09/21/2023 Meeting	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	Request for Proposal (RFP)	1411276046 - Progressive Design-Build Services for the JEA Headquarters Fitness Center Project	McElroy, Alan	Auld & White Constructors LLC	Capital	\$95,100.00	N/A	N/A	N/A	Project Completion Estimated: February 2024 Phase 1	Yes - Simes & Rosch - MEP Design (40.5%, \$29,885.86)
	<p>Advised: 05/31/2023 Proposal Opening: 07/06/2023 Three (3) Proposals Received For additional information contact: Elaine Selders</p> <p>JEA is requesting Responses from qualified Design-Build (DB) firms to provide design and construction services for the re-design and construction of the JEA Headquarters (HQ) Fitness Center.</p> <p>JEA evaluated Proposals based on Professional Staff Experience, Design and Construction Approach and Workplan, Company Experience and Performance and a JSEB Goal. Auld &amp; White was deemed the most highly qualified Proposer and the award amount is approximately 21% less than the Budget Estimate and has been deemed reasonable.</p>										
3	Request for Proposal (RFP)	1411292246 - Group Wellbeing Program	Emanuel, David	HealthCheck 360	O&M	\$945,798.00	N/A	N/A	N/A	Three (3) Years w/Two (2) – One (1) Yr. Renewals Start Date: 10/01/2023 End Date: 09/30/2026	N/A
	<p>Advised: 06/20/2023 Proposal Opening: 07/11/2023 Three (3) Proposals Received For additional information contact: Elaine Selders</p> <p>The purpose of this solicitation for a Group Wellbeing Program (this "Solicitation") is to evaluate and select a Company to provide group wellbeing program services as described in this Solicitation (the "Work") and to determine the best method for JEA to procure the Work with regards to pricing, quality, design, and workmanship.</p> <p>JEA utilized the expertise of Gallagher Benefit Services to administer and evaluate this RFP in compliance with JEA purchasing requirements. JEA evaluated Proposals based on Rates, Experience of Professional Personnel, Past Performance/Company Experience, Cultural and Strategic alignment, and Financial Responsibility. HealthCheck 360 was deemed the most highly qualified Proposer. The pricing shall remain firm for the initial term of the contract and rates will be negotiated for the optional renewal terms. The award amount is approximately 10% higher than the Budget Estimate but the award amount has been deemed reasonable.</p>										
4	Invitation for Bid (IFB)	1411349846 - Deerwood III Water Treatment Plant (WTP) – Well 2 Replacement	Melendez	Petticoat-Schmitt Civil Contractors, Inc.	Capital	\$2,002,787.49	N/A	\$2,002,787.49	N/A	Project Completion (Expected: February 2025)	Optional
	<p>Advised: 08/08/2023 Opened: 09/19/2023 Two (2) Bids Received For additional information contact: Lynn Rix</p> <p>The scope of work for this Solicitation includes construction of a new water supply well including a 1,000 gallon per minute (gpm) production well completed in the upper Floridan aquifer, approximately 200 linear feet of 10-inch raw water pipeline, wellhead, associated electrical, instrumentation and control, associated appurtenances and site/civil improvements, including the demolition of existing Well No. 2. At the bid opening, JEA received two (2) Bids. Other potential bidders cited substantial workloads for not participating. Petticoat-Schmitt Civil Contractors, Inc. is the lowest responsive and responsible Bidder. and is 7% lower than the Business Unit estimate.</p>										
5	Request for Proposal (RFP)	1411243046 - Engineering Services for Ponte Vedra WRF Improvements	Melendez	Mott MacDonald Florida, LLC	Capital	\$1,771,227.00	N/A	\$1,771,227.00	N/A	Project Completion (Expected: April 2025)	Five Percent (5%) Evaluation Criteria  Meskel & Associates Engineering (Geotechnical Engineering Services) - 1.95%  Smith Surveying Group (Survey) - 8.29%
	<p>Advised: 05/16/2023 Opened: 06/21/2023 Three (3) Proposals Received Public Evaluation Meeting: 07/20/2023 For additional information contact: Darriel Brown</p> <p>This scope of work is to evaluate and select a Company that can provide professional Engineering Services for the rehabilitation and improvement of the Ponte Vedra Water Reclamation Facility (WRF). This scope also includes design, permitting, and bid phase services (services during construction will be added at a later stage via contract amendment).</p> <p>The hourly rates are deemed reasonable compared to historical rates for work of this nature. The rates are fixed for the first year and may be increased by CPI annually if requested by the firm.</p>										

**Consent Agenda Action**

Committee Members in Attendance	Names	<b>Ted Phillips, Janie Smalley, Tony Long</b>
Motion by:	Janie Smalley,	
Second By:	Tony Long	

Award #	Type of Award	Solicitation # & Short Description/Title	VP	Awardee	Funding Source	Award Amount	Original Award Amount	New Not-to-Exceed	Amendments	Term	JSEB Participation (Y/N) If Y, then list company name(s) (% , \$ - awarded)
Committee Decision	Approved										
<b>Consent and Regular Agenda Signatures</b>											
Budget	Name/Title	<u>Stephanie M. Nealy</u> Manager, CBP									
Awards Chairman	Name/Title	<u>Theodore B. Phillips</u> CFO									
Procurement	Name/Title	<u>J. M. G. M.</u>									
Legal	Name/Title	<u>Rebecca Lavis</u>									

**JEA Awards Agenda**  
**September 21, 2023**  
**225 North Pearl St., Jacksonville, FL 32202 - Hydrangea Room 1st Floor**


[Teams Meeting Info](#)

**Consent Agenda**

The Chief Procurement Officer offers the following items for the JEA Awards Consent Agenda. Any item may be moved from the Consent Agenda to the Regular Agenda by a committee member asking that the item be considered separately. **All items on the Consent agenda have been approved by OGC, Budget and the Business Unit Vice President and Chief.** The posting of this agenda serves as an official notice of JEA's intended decision for all recommended actions for **Formal Purchases** as defined by **Section 3-101 of the JEA Procurement Code**. Please refer to JEA's Procurement Code, if you wish to protest any of these items.

Award #	Type of Award	Solicitation # & Short Description/Title	VP	Awardee	Funding Source	Award Amount	Original Award Amount	New Not-to-Exceed	Amendments	Term	JSEB Participation (Y/N) If Y, then list company name(s)	
1	Minutes	Minutes from 09/07/2023 Meeting	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
2	Invitation to Negotiate (ITN)	1411322446 Wastewater Odor Control Chemicals	Vu	USP Technologies	O&M	\$10,077,000.00	N/A	\$10,077,000.00	N/A	Three (3) Years, w/ Two (2) - 1 Yr. Renewals	N/A	
<p>Advised: 6/23/2023            Bid Opening: 08/22/2023            Two (2) Responses Received            For additional information contact: Darriel Brown</p> <p>The purpose of this Invitation to Negotiate (ITN) is to evaluate and select a vendor that can provide the necessary chemicals, equipment and services for odor, corrosion, and scale control in the collection system and in-plant processes and provide the best value to JEA. JEA evaluated the respondents based on price, experience, and work plan. USP Technologies was deemed the highest evaluated responsive and responsible respondent.</p> <p>Solicitations for this chemical have historically resulted in low participation; there was one respondent for the previous solicitation in 2018. In efforts to increase participation, JEA issued multiple addenda to answer questions and allowed for multiple due date extensions for better responses. JEA received responses from two companies this time.</p> <p>USP Technologies responded with the the lowest price of \$4.10/gal which is an increase of 9.6% from the current price of \$3.74/gal. JEA followed the ITN process to allow for Best and Final Offer (BAFO) responses; both respondents maintained the pricing from their original submission. The contract prices will remain fixed through the first year (1) year of the Contract. Thereafter, the vendor may request a Consumer Price Index (CPI) adjustment annually. CPI adjustments will be capped at 5%.</p>												
3	Contract Increase	Material Planning Support	McElroy, Alan	Blue Burro Technology, LLC	O&M	\$528,000.00	\$705,000.00	\$1,900,000.00		02/16/2023 - \$667,000.00	Project Completion Start: 09/19/2022 End: 09/31/2024	N/A
<p>Last Awarded on 02/16/2023            For additional information contact: Elaine Selders</p> <p>The scope of work for this contract is for Material Planning gap analysis and support services.</p> <p>This increase will add funds to the contract to support procurements on-going reorganization, to include analytical support required to bridge the gap until the team is in place, trained and ready to execute. Six months is just an estimate on the timing so funding is included for an entire year. However, this amount is a not to exceed amount and the contract can be terminated with a 60 day notice if the full 12 months is not needed.</p> <p>Blue Burro is offering a 10% monthly fixed fee discount to provide two operational support analysts for a monthly fee of \$44,000.00 per month totaling \$528,000.00 for up to 12 months. Travel expenses will follow the JEA procedure at no more than 10% of the total contract, if needed.</p>												
4	Change Order	1411214646 - Protection and Controls Cabinet Manufacturing	Melendez	KEMCO Industries, LLC Schweitzer Engineering Laboratories, Inc.	capital	\$7,167,215.30 \$3,017,663.70	\$10,238,879.00	N/A	N/A		Five (5) Years, w/ Two (2) - 1 Yr. Renewals Start: 7/30/2023 End: 6/29/2028	N
<p>Originally Awarded 07/20/2023            For Additional Information Contact: Rodney Lovgren</p> <p>The scope of work is for the fabrication, manufacturing, testing, delivery and installation of new relay control panels for various JEA system protection and control projects. Kemco Industries was originally awarded the full scope of supply. During more indepth reviews and layout of projects plans, JEA determined Kemco Industries will have some capacity and lead time constraints. JEA is electing to award a Secondary contract to Schweitzer Engineering Laboratories, Inc. on the basis of a 70/30 Split. JEA will evaluate performance and lead times and rebalance as necessary. The total Award amount remains the same as the original award.</p>												
5	Rescind	141118446 - Byproduct Storage Area Operations Services	Erixton	N/A	O&M	N/A	N/A	N/A	N/A	N/A	N	
<p>Bid Opening - 08/01/2023            For Additional Information Contact: Rodney Lovgren</p> <p>1411285246 The scope of solicitation is for the providing of manpower and equipment to operate JEA's Byproduct Storage Area (BSA). The services include loading trucks railcars, moving byproduct (ash) from Northside's generating station. Three (companies) participated in the proposal process, including onsite prebid and performed site visits. After receipts of responses, JEA performed an insource, outsource pricing comparison for the three companies that submitted responses and found JEA's inhouse operations pricing for both manpower and equipment were more economical than outsourcing the work. JEA is requesting to rescind this bid. Bidders responses will not be subject to public records requests for a period of one (1) year.</p>												
6	Contract Increase (Originally Informal Emergency)	Solicitation #: NA - Limestone Crushing Rental Equipment	Erixton	Company Wrench, LTD	O&M	\$22,735.36	\$481,989.83	\$504,725.19	N/A		Project Completion	N
<p>Originally Awarded 09/22/2022            For Additional Information Contact: Rodney Lovgren</p> <p>JEA informally awarded an emergency procurement to rent a 4043 TR impact crusher to support JEA's limestone crushing operations. This equipment was originally needed to support crushing unsized limestone due to sized limestone availability.</p> <p>In parallel to the utilization of the rental equipment, JEA sourced crushing services, (which are currently in use for incoming limestone). Additionally, JEA has sourced and is in the process of installing equipment to support insourcing all crushing services for JEA.</p> <p>The rental equipment has been removed from site. JEA did not bring this Award back to awards committee prior to crossing formal threshold at \$300,000.00 with the knowledge this had a finite project timeline and sufficient O&amp;M funding available. The decision was made to wait to bring to awards until project was complete. This award is for the final payment to the rental equipment company.</p>												

**Consent Agenda Action**

Award #	Type of Award	Solicitation # & Short Description/Title	VP	Awardee	Funding Source	Award Amount	Original Award Amount	New Not-to-Exceed	Amendments	Term	JSEB Participation (Y/N) If Y, then list company name(s).
Committee Members in Attendance	Names	Joe Orfano, Tony Long, Janie Smalley									
Motion by:	Tony Long										
Second By:	Janie Smalley										
Committee Decision	Approved										
Consent and Regular Agenda Signatures											
Budget	Name/Title	Sara Goodwin, Manager Operating Budgets									
Awards Chairman	Name/Title	 VP, Financial Services									
Procurement	Name/Title										
Legal	Name/Title	Rebecca Lavis									



AULD & WHITE  
CONSTRUCTORS • LLC

September 14, 2023

Re: JEA Headquarters Fitness Center  
Phase 1 - 90% Design Fee Proposal

Ms Elaine Selders  
JEA  
21 W. Church Street  
Jacksonville, Florida 32202

Dear Elaine:

Auld & White Constructors, LLC (AWC) is pleased to submit our proposal for 90% Design and Preconstruction Services for the JEA Headquarters (HQ) Fitness Center project – Phase 1 based on JEA Solicitation No. 1411276046 and construction documents prepared by RS&H dated 7/20/2022.

AWC understands the intent is to complete this design-build project utilizing a cost-plus with a Guaranteed Maximum Price (GMP), “open-book” arrangement. Outlined in the attached Exhibit A are the costs and efforts as they apply to our proposal for Phase 1. Exhibit B contains a detailed breakdown of the estimated hours and hourly rate sheets for the Design Build team.

Preconstruction Phase 1 includes:

1. Complete Pre-Construction Services will be provided inclusive of initial project cost estimating, evaluation of construction materials, constructability reviews, value engineering, scheduling and all other team efforts to establish a solid GMP.
2. Architectural / Engineering Services include structural, mechanical, electrical, plumbing and fire protection to produce 30% and 90% Design Documents.
3. AWC anticipates competitively bidding the key work scopes and providing a GMP prior to award of Phase 2.
4. 10% overhead and profit percentage is applied to the total project cost.
5. Preconstruction Phase duration is 28 weeks.

Total 90% Design Proposal: \$95,100

If you have any questions or need further clarification, please feel free to contact me at (904) 296-2555 or (904) 806-2563. Thank you for this opportunity and we look forward to working with JEA on another successful project.

Sincerely,

A handwritten signature in cursive script that reads "Cindy Reis".

Cindy Reis  
Project Development Manager – Public Sector

attachments

Enclosures

c: Billy-Dale Tyson, Auld & White Constructors, LLC

**EXHIBIT A**  
**September 14, 2023**

**JEA Headquarters Fitness Center  
Construction Management (CM)**

**PHASE I**

<b>Pre - Construction Phase Fee</b>			<b>\$</b>	<b>12,770</b>
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<b>Design Development Fee</b>			<b>\$</b>	<b>73,727</b>
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<b>Overhead and Profit %</b>		<b>%</b>		<b>10%</b>
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<b>TOTAL PHASE I</b>			<b>\$</b>	<b>95,100</b>
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APPENDIX B - PROPOSED PRICING AND FEE EXHIBIT

Description of Professional Services	Pricing for Services (Express as PEPM)		
	One-time Costs	Monthly	Annually
<b>Implementation Fee</b> a) Data integration set-up - electronic files being received from respective vendors. b) Health Coaching - dashboard set-up	N/A	\$3.47 Per eligible employee per month. Spouses included at no additional cost  \$7,634 monthly estimate	\$91,608 estimated annual cost
<b>Condition Management Programs – cost per participating member</b> a) Asthma b) Hypertension c) Diabetes d) High Cholesterol	N/A	\$4.10 Per health plan employee per month. Dependents included at no additional cost  \$9,020 monthly estimate	\$108,240 estimated annual cost
<b>Biometrics (annual event) – onsite or remote locations for employees and spouses:</b> <ul style="list-style-type: none"> <li>• finger stick (fasting) blood draw</li> <li>• Comprehensive blood panel test – HDL, LDL, total cholesterol, triglycerides, glucose, nicotine, GSP, blood urea nitrogen, creatinine, total bilirubin, AST(SGOT), ALT(SGPT), alkaline phosphates, total protein, albumin, globulin and PSA</li> <li>• Blood pressure</li> <li>• Height</li> <li>• Weight</li> </ul> Price should be per location for up to 0-50, 51-100, 100+ of people	\$50 per Onsite 20+ participants \$79 per Onsite 10-19 participants \$89 per Onsite 6-9 participants \$109 per Onsite 1-5 participants \$79 for patient service center \$15 for PCP form  These are not available with fingerstick screenings or are an additional cost: <ul style="list-style-type: none"> <li>• Fingerstick Nicotine- Additional cost of \$25 per test</li> <li>• Not Available: GSP, blood urea nitrogen, creatinine, total bilirubin, AST(SGOT), ALT(SGPT), alkaline phosphates, total protein, albumin, globulin and PSA</li> </ul>	N/A	Currently JEA does Venipuncture screening.
<b>Biometrics (annual event)– same as above with fasting venipuncture replacing fasting finger stick</b>	\$50 per Onsite 20+ participants \$79 per Onsite 10-19 participants \$89 per Onsite 6-9 participants \$109 per Onsite 1-5 participants \$79 for patient service center \$15 for PCP form	N/A	\$81,890 estimated annual cost (assumes 50% employee participation and 20% spouse participation)
<b>Add-on services with Biometrics (annual event):</b> a) Waist & neck measurement b) Body Fat Index	Included	Included	Included
<b>Health Coaching:</b> a) Included with Biometric (annual event) b) Continual support until next Biometric (annual event)	N/A Unlimited inbound coaching Critical Value biometric coaching included  Fingerstick results review can be included at no additional cost  Venipuncture Review of Findings Coaching:	High risk outbound quarterly outreach: \$1.27 PEPM  \$2,794 monthly estimate	\$ 33,528 estimated annual cost for targeted health coaching



**Award #3 9/28/2023 Supporting Documents**

<p><b>Personalize Health Report</b> – incorporate biometric measurements and health risk assessment (HRA) completion for each employee and spouse.</p> <ul style="list-style-type: none"> <li>• Summary available during biometric (annual event)</li> <li>• Comprehensive report after biometric (annual event)</li> <li>• Includes scoring of biometric information collected (i.e. 100 pts perfect score)</li> <li>• Includes prior history for reference for major components</li> </ul> <p>a) On-line only b) On-line and paper</p>	<p>Online Included Paper is \$29 per paper HRA/report</p>	<p>N/A</p>	<p>N/A</p>
<p><b>Communication Support:</b></p> <p>a) Portal Customization Options b) Private Challenges c) Private Communities d) Resource Page</p>	<p>Included</p>	<p>Included</p>	<p>Included</p>
<p><b>Other Fees</b></p> <p>a) Travel Fees and Off Hour Surcharges b) Additional Testing c) Paper Mailings d) Use of HealthCheck360 Marketing team</p>	<p>a) Potential phlebotomist travel fees or off-hour fees b) PSA and A1c Testing: \$19.75 per test c) Quoted based on project d) Quoted based on project</p>	<p>N/A</p>	<p>TBD</p>
<p><b>GRAND TOTAL for Three Years to also be submitted in Zycus and on the Response Form: \$ 315,266 estimated annual cost</b></p>			

The above fees are guaranteed for 36 months. The initial term is for three years but JEA has the option to renew for two, one-year terms or award a longer contract term based on the guarantee period.

I confirm the fees, costs and charges provided on this form have been accurately disclosed, are net of commissions and are guaranteed for the time period stated. I understand that any fees, costs or additional charges not disclosed in this **APPENDIX B – PROPOSED PRICING AND FEE EXHIBIT** are not the responsibility of JEA and the services must be provided.

**Failure to sign this form may result in the lowering of your score or disqualification of your proposal.**

*Michael Kelly*

07/24/2023

\_\_\_\_\_  
Signature of Proposer Representative

\_\_\_\_\_  
Date

**Award #4 9/28/2023 Supporting Documents**

Addendum 1 Appendix B - Bid Form  
 1411349846 – Deerwood III Water Treatment Plant (WTP) – Well 2 Replacement

Submit the Bid electronically as described in section 1.3 of the Solicitation.

Company Name: PETTICOAT-SCHMITT CIVIL CONTRACTORS INC.

Company's Address: 6380 PHILIPS HWY., JACKSONVILLE, FL 32216

License Number: CGC #057651; CUC #1226048

Phone Number: (904) 751-0888 FAX No: (904) 751-0988 Email Address: jrumer@petticoatschmitt.com

<b><u>BID SECURITY REQUIREMENTS</u></b> <input type="checkbox"/> None required <input checked="" type="checkbox"/> Certified Check or Bond (Five Percent (5%))	<b><u>TERM OF CONTRACT</u></b> <input type="checkbox"/> One Time Purchase <input type="checkbox"/> Annual Requirements <input checked="" type="checkbox"/> Other, Specify - Project Completion
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<b><u>SAMPLE REQUIREMENTS</u></b> <input checked="" type="checkbox"/> None required <input type="checkbox"/> Samples required prior to Bid Opening <input type="checkbox"/> Samples may be required subsequent to Bid Opening	<b><u>SECTION 255.05, FLORIDA STATUTES CONTRACT BOND</u></b> <input type="checkbox"/> None required <input checked="" type="checkbox"/> Bond required 100% of Bid Award
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<b><u>QUANTITIES</u></b> <input type="checkbox"/> Quantities indicated are exacting <input checked="" type="checkbox"/> Quantities indicated reflect the approximate quantities to be purchased Throughout the Contract period and are subject to fluctuation in accordance with actual requirements.	<b><u>INSURANCE REQUIREMENTS</u></b> Insurance required
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<b><u>PAYMENT DISCOUNTS</u></b> <input type="checkbox"/> 1% 20, net 30 <input type="checkbox"/> 2% 10, net 30 <input type="checkbox"/> Other _____ <input checked="" type="checkbox"/> None Offered	
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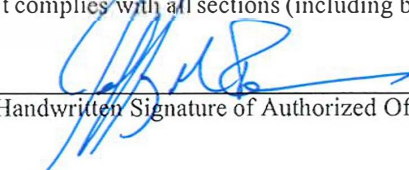
<b>ENTER YOUR BID FOR SOLICITATION 1411349846</b>	<b>TOTAL BID PRICE</b>
Total Bid Price (enter total from cell G49 in the Bid Workbook)	\$ <b>2,002,787.49</b>

I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public "as-is".

**BIDDER CERTIFICATION**

By submitting this Bid, the Bidder certifies that it has read and reviewed all of the documents pertaining to this Solicitation, that the person signing below is an authorized representative of the Bidding Company, that the Company is legally authorized to do business in the State of Florida, and that the Company maintains in active status an appropriate contractor's license for the work (if applicable). The Bidder also certifies that it complies with all sections (including but not limited to Conflict of Interest and Ethics) of this Solicitation.

We have received addenda \_\_\_\_\_  
1 through 1

  
 \_\_\_\_\_  
 Handwritten Signature of Authorized Officer of Company or Agent

9/19/23  
 \_\_\_\_\_  
 Date

Jeffrey Rumer, Executive Vice President of Operations  
 \_\_\_\_\_  
 Printed Name and Title

## Award #4 9/28/2023 Supporting Documents

1411349846 Addendum 1 Appendix B - Bid Workbook  
Deerwood III Water Treatment Plant (WTP) - Well 2 Replacement  
(Only complete the prices in yellow cells)

Company:

PETTICOAT SCHMITT

Item	Item Description	Unit of Measure	Est. Qty.	Unit Price	Extended Price
<b>1</b>	<b>Site Preparation and Restoration</b>				
a	Site Work (Includes Sedimentation and Erosion Control)	LS	1	\$ 56,600.00	\$56,600.00
b	Temporary Site Security Fence	LS	1	\$ 8,400.00	\$8,400.00
c	Fluid Management	LS	1	\$ 66,500.00	\$66,500.00
d	Site Restoration and Completion (grading, seeding/sodding, Landscaping, irrigation system, driveway, gravel surface, and privacy fencing)	LS	1	\$ 217,000.00	\$217,000.00
<b>2</b>	<b>Installation of Deerwood Well No. 2R</b>				
a	Mobilization/Demobilization (Cannot exceed 20% of the total well construction costs) includes pit casing (optional), clean fill for road and rig stabilization, survey, and permanent construction fence	LS	1	\$ 68,840.00	\$68,840.00
b	Drill 12.25-inch diameter pilot boring to approximately 100 feet ± below land surface (bls) into the top of the Hawthorn Group	FT	100	\$ 125.20	\$12,520.00
c	Perform geophysical logging (caliper, gamma and electric)	LS	1	\$ 8,135.60	\$8,135.60
d	Ream to a minimal of 30-inch dia. nominal borehole using the mud-rotary method to 100 feet ± bls.	FT	100	\$ 125.20	\$12,520.00
e	Perform geophysical logging (caliper and gamma)	LS	1	\$ 8,135.60	\$8,135.60
f	Furnish, drill, install and grout in place 24-inch dia. Outer Diameter (OD), 0.375-inch thick wall steel surface casing through surficial unconsolidated sediments (from 0-feet to 100-feet ± bls)	FT	100	\$ 251.35	\$25,135.00
g	Drill 12.25-inch dia. pilot boring to approximately 550-feet ± bls into the top of the Floridan Aquifer	FT	450	\$ 156.50	\$70,425.00
h	Perform geophysical logging (caliper, gamma and electric)	LS	1	\$ 8,135.60	\$8,135.60
i	Ream a nominal 23-inch dia. borehole using the mud-rotary method to approximately 550-feet ± bls	FT	450	\$ 156.50	\$70,425.00
j	Perform geophysical logging (caliper and gamma)	LS	1	\$ 8,135.60	\$8,135.60
k	Furnish, drill, install and grout in place 16-inch dia. OD, 0.375-inch thick wall steel surface casing through Hawthorn Group into top of Floridan Aquifer (from 0-feet to 550-feet ± bls)	FT	550	\$ 250.35	\$137,692.50
l	Drill 12.25" pilot boring using reverse air drilling method to approximately 700-feet ± bls	FT	150	\$ 156.50	\$23,475.00
m	Perform static and dynamic geophysical and video logging	LS	1	\$ 22,530.00	\$22,530.00
n	Ream a nominal 15-inch dia. borehole using reverse air drilling method to approximately 700-feet ± bls.	FT	150	\$ 62.60	\$9,390.00
o	Perform geophysical logging (caliper, gamma and video)	LS	1	\$ 6,260.00	\$6,260.00
p	Perform plumbness and alignment test	LS	1	\$ 11,265.00	\$11,265.00
q	Develop the well utilizing temporary pump with flow rate up to 1,500 gpm	Hour	14	\$ 375.50	\$5,257.00
r	Conduct step drawdown test, field water samples and collect Primary and Secondary water samples.	LS	1	\$ 21,905.00	\$21,905.00
<b>3</b>	<b>Wellhead Assembly</b>				
a	Well No. 2 Wellhead Assembly (install final casing flange, pump, structural well pad, well header piping, well header pipe supports, and associated valves and fittings).	LS	1	\$ 271,200.00	\$271,200.00
b	Electrical and instrumentation for wellhead assembly system.	LS	1	\$ 458,000.00	\$458,000.00
<b>4</b>	<b>Well 2 Abandonment</b>				
a	Demolition including well slab, well casing, gravel pack, and utility pipe.	LS	1	\$ 23,050.00	\$23,050.00
b	Perform a geophysical logging.	LS	1	\$ 8,620.00	\$8,620.00
c	Grout for abandonment	CY	56	\$ 927.50	\$51,940.00
<b>5</b>	<b>Allowance</b>				
a	Contractor's provision for equipment standby time (enter price/hour)	Hour	24	\$ 65.00	\$1,560.00
b	Contractor's provision for equipment and crew standby time (enter price/hour)	Hour	24	\$ 111.00	\$2,664.00
<b>Subtotal</b>					<b>\$1,695,715.90</b>
Supplemental Work Authorization (SWA)					\$125,000.00
<b>Subtotal of Unit Pricing + SWA</b>					<b>\$1,820,715.90</b>
<b>6</b>	<b>General Conditions (Including Well Construction Permit and Monthly Submittals (schedule, cash flow, red line drawings, EAM, etc.)</b>				
a	General Conditions (Maximum of 10% of Subtotal of Unit Pricing + SWA)			<b>10.00%</b>	\$182,071.59

**Bid Total - Enter this value Appendix B - Bid Form**

**\$2,002,787.49**

## Award #5 9/28/2023 Supporting Documents

### 1411243046 Engineering Services for the Ponte Vedra WRF Improvements Project

Vendor Rankings	James Hatch	Chad Bell	David Williams	Σ Rank	Rank	Total Score
Carollo Engineers, Inc.	2	3	2	7	3	249.75
McKim and Creed, Inc.	1	2	3	6	2	251.90
Mott McDonald Florida, LLC	3	1	1	5	1	266.70

James Hatch	Professional Staff Experience (30 Points)	Design Approach and Work Plan (40 Points)	Company Experience (25 Points)	JSEB (5 Points)	Total	Rank
Carollo Engineers, Inc.	28.45	37	23	4	92.45	2
McKim and Creed, Inc.	28.55	36	24	4	92.55	1
Mott McDonald Florida, LLC	29.05	35	24	4	92.05	3

Chad Bell	Professional Staff Experience (30 Points)	Design Approach and Work Plan (40 Points)	Company Experience (25 Points)	JSEB (5 Points)	Total	Rank
Carollo Engineers, Inc.	30.00	37	18	4	89.00	3
McKim and Creed, Inc.	29.80	38	22	4	93.80	2
Mott McDonald Florida, LLC	30.00	39	25	4	98.00	1

David Williams	Professional Staff Experience (30 Points)	Design Approach and Work Plan (40 Points)	Company Experience (25 Points)	JSEB (5 Points)	Total	Rank
Carollo Engineers, Inc.	19.30	33	12	4	68.30	2
McKim and Creed, Inc.	19.55	24	18	4	65.55	3
Mott McDonald Florida, LLC	21.65	31	20	4	76.65	1

Overall Averages	Professional Staff Experience (30 Points)	Design Approach and Work Plan (40 Points)	Company Experience (25 Points)	JSEB (5 Points)	Total
Carollo Engineers, Inc.	25.92	35.67	17.67	4.00	83.25
McKim and Creed, Inc.	25.97	32.67	21.33	4.00	83.97
Mott McDonald Florida, LLC	26.90	35.00	23.00	4.00	88.90



September 12, 2023

James Hatch  
Project Manager  
JEA  
225 North Pearl Street  
Jacksonville, FL 32202

**Subject: Ponte Vedra WRF Improvements Professional Engineering Services –  
Scope and Fee  
Mott MacDonald Project No: 502101507**

Dear Mr. Hatch:

Mott MacDonald (MM) is pleased to submit this scope and fee to JEA for the design, permitting, bidding, and general services during construction for the Ponte Vedra WRF Improvements project. MM was selected to perform this work as part of Solicitation 1411243046. The following exhibit is a clarification of JEA Statement of Work dated April 10, 2023 (hereafter SOW).

### **SCOPE SUMMARY**

The following list includes, but is not limited to, all items required for the rehabilitation and upgrades of Ponte Vedra WRF.

#### **1. Headworks**

- 1.1. The condition of coatings/liners in flow channels are to be assessed for repair or replacement.
- 1.2. Existing drum screen is manufactured by Huber which is no longer on standard. Existing drum screen to be replaced to match new JEA standard.
  - 1.2.1. The design basis is for rehabilitation of the headworks and incorporate two automatic center flow band screen(s).
  - 1.2.2. The existing bar rack will be removed for the new screen and the existing screen channel converted to a bar rack.
  - 1.2.3. Grit removal is excluded in the evaluation of design.
- 1.3. Replace the existing aluminum channel covers with new low-profile aluminum covers with hinged hatches at selected areas.
- 1.4. Replace all electrical and controls for both new screen(s)
  - 1.4.1. Provide power for new screen(s) and control panel.
  - 1.4.2. Provide communication from the headworks to the control center (SCADA) for new screen(s) including but not limited to alarms, level transducers, screen operation, etc.

#### **2. Sequence Batch Reactor (SBR) No. 1 & 2 (Rehabilitated)**

- 2.1. Basis of design will be Jet-Tech system; with an alternate design prepared for an additional SBR manufacturer.
  - 2.1.1. Replace US Filter Jet-Tech Panel.
- 2.2. Provide a design and supplement Section 448 as needed to repair concrete.
- 2.3. Replace SBR equipment No. 1 and 2 with 316 SST piping and equipment.

- 2.4. Replace process valves with actuators (ProfiNET and each drop with isolator)
- 2.5. Replace effluent valves at each SBR.
- 2.6. Replace instrumentation on each SBR.
- 2.7. Replace magnetic meter and control display.
- 2.8. Improve tank drain system to avoid clogging.
- 2.9. Replace piping and valving.
- 2.10. Replace WAS pump.
- 2.11. Improvements to existing SBRs will involve removal of existing jet mixing air and motive water distribution headers and replacement with new fine bubble aeration systems and either a floating mixer or pumped mixing for the react phase.
- 2.12. Existing jet mixing pumps, guide rails and lifting systems to be removed from inside existing SBRs. They will be replaced with a new jet pump system which places pump outside basin at ground level.
- 2.13. The existing fixed decant system will be removed from existing SBRs and new floating decanter systems to remove supernatant off the top of water are to be installed.
- 2.14. Coordinate with Fluidyne as necessary to modify controls.
- 2.15. Provide communication to the control center (SCADA) for new VFD's for existing and new blowers including but not limited to alarms, controls for blower operation, etc.
- 2.16. Revise all electrical and controls to existing systems being relocated, removed, or replaced.

### **3. Sequence Batch Reactor (SBR) No. 3 (New)**

- 3.1. A new third SBR biological treatment unit, consisting of a new circular concrete tank will be constructed to match inside dimensions and operating depths of the two (2) existing SBRs. The new SBR concrete tank will be designed as a prestressed concrete tank.
- 3.2. All ancillary SBR systems to match new systems installed for tanks 1 and 2.
- 3.3. The new SBR is to be provided with a new self-priming type wastewater pump installed at grade outside the tank, similar to existing WAS pumps.

### **4. Existing Equalization/Aerobic Digestion Tank (Rehabilitated)**

- 4.1. Provide a design and supplement Section 448 as needed to repair concrete.
- 4.2. During construction an AWWA-D110 prestressed tank builder will assess the condition of the two (2) SBR tanks and EQ tank/aerobic digester. A summary report should be provided outlining repair and rehabilitation measures and repairs will be made as per the unit price in the bid form.
- 4.3. The existing air piping and coarse diffusers will be replaced or modified as needed. Engineer will confirm the existing large blowers can handle new configuration.

### **5. Post Equalization Basin (New)**

- 5.1. A new post EQ basin will be constructed south of the existing EQ/digester. Engineer will evaluate the required EQ basin volume size. New EQ basin is to be constructed at an elevation so that it operates properly within plant hydraulic profile. The tank will be designed as a prestressed concrete tank. The post equalization tank configuration will be circular not rectangular.
- 5.2. Low energy mixing will be evaluated for the new EQ basin to keep the contents uniform.
- 5.3. A new post EQ pump station will be built adjacent to new post EQ basin. The new post EQ pump station will consist of dry-pit wastewater pumps driven by VFDs. VFDs will

either be located in the existing electrical room or the new precast concrete electrical along with UV electrical equipment.

- 5.4. Provide power to new post EQ basin and pump station.
- 5.5. Provide communication to the control center (SCADA) for new post EQ basin and pump station including but not limited to alarms, check valves, MOV's, controls for pump operation, etc.
- 5.6. Demolition of all electrical and controls to existing post EQ/Digestion tank system.

#### **6. Blower Building (Modify)**

- 6.1. Evaluate the blower system needs for existing and proposed equipment. Options including:
  - 6.1.1. A new additional blower inside the existing blower building to accommodate addition of the new SBR.
  - 6.1.2. Evaluation of VFDs as well as throttling valves for the blowers
- 6.2. Provide power for new or existing and new blower(s).
- 6.3. Provide communication to the control center (SCADA) for new VFD's for existing and new blowers including but not limited to alarms, controls for blower operation, etc.
- 6.4. Blower discharge piping and valves will be provided similar to the existing system so that each SBR and the digester can be served by one of two blowers and one larger "swing" blower can be used for either an SBR or digester.
- 6.5. Replace blower DI piping below grade with stainless pipe.

#### **7. Electrical Building (Modify)**

- 7.1. All electrical control equipment (VFD, SS, Starter, Flowmeter, Actuator, Analytical Device, Skid, etc) shall be controlled by ProfiNET (preference) with passive Isolator and/or Profibus with surge suppressor.
- 7.2. All PLC replacement shall be based on S7-1500R SIPLUS and Hot Swappable Backplane.
- 7.3. Upgrade the lighting to LED in the electrical and blower rooms.
- 7.4. Evaluation of existing HVAC system in the electrical room to confirm cooling capacity is sufficient for additional electrical equipment.
- 7.5. Coordinate with Beaches Electric for proposed loads. Confirm existing transformer can serve the new load if not secure a new transformer. Coordinate new work required.

#### **8. Emergency Electrical Generator/Fuel Tank**

- 8.1. Assess current emergency electrical generator to determine it meets the load capacity for current/proposed equipment.  
*Note: This exclude design of a new generator. If a new generator is required, an amendment will be issued to address the additional work.*

#### **9. Sand Filters (New)**

- 9.1. The existing new filter unit (Gravisand X-cell Traveling Bridge Filter) will be retained. The location of new sand filter is to be evaluated between two locations, either at location of existing older units or north of newer unit.  
*Note: The intent is to match the existing filter in design and capacity. Different types of filters are not being evaluated. No improvements to the existing filter are included.*
- 9.2. Provide power for new traveling bridge sand filter and control panel.

- 9.3. Provide communication to the control center (SCADA) for new traveling bridge sand filter including but not limited to alarms, controls for filter operation, etc.
- 9.4. Demolish all electrical and controls to existing systems no longer needed.

#### **10. UV Disinfection System (New)**

- 10.1. Evaluate options for Trojan UV system to meet high-level disinfection. Basis of design is relocating the UV system from Nassau WRF and installing in the existing channel by modifying the existing channel or constructing a new channel.
  - 10.1.1. Relocation of one channel of UV from Nassau WRF. Trojan 3000+ UV units are currently located at the existing Nassau WRF. Existing system at Nassau to be evaluated by Trojan for feasibility of relocation. The existing UV systems consist of existing transformers, power panels, control panels (SCC) and three PDC's per UV system with disconnects.
  - 10.1.2. Visit Nassau site to inspect existing equipment to determine space required and budget to obtain support from Trojan as required for relocation and startup.
  - 10.1.3. New UV system (two channels) adjacent to the existing system and demolition of existing with Trojan as the basis of design (both Signa and Trojan 3000+)
- 10.2. A second parallel UV disinfection channel is to be included so that plant has 1 duty + 1 standby UV disinfection channel for peak flow. Both UV channels will be located under existing canopy and serviced by existing gantry crane.
- 10.3. Locate space for relocated transformers, power panels and control panels (SCC) in conditioned, clean space in precast concrete electrical building. PDC's with disconnects are outdoor rated.
- 10.4. Provide power for new UV system. Coordinate stub-up locations for conduit at PDC's with Trojan and equipment.
- 10.5. Provide communication to the control center (SCADA) for new UV system including but not limited to alarms, controls for MOV's to direct flow to and from UV as may be required, etc. Coordinate all required conductors for Trojan equipment.
- 10.6. An ethernet card may be required on the SCADA computer.

#### **11. In-plant Lift Station (replace)**

- 11.1. Existing lift station to be replaced with new in-plant lift station.

#### **12. In-plant Potable Water System (new)**

- 12.1. Provide a pressure booster system. Provide the necessary accessories to sustain volume and pressure within the potable water system for onsite plant uses.

#### **13. Operation Buildings**

- 13.1. Improve central control console (HMI)

#### **14. Site Improvements**

- 14.1. Yard Piping
  - 14.1.1. All yard piping improvements as required for improvements. All existing piping sizing will be evaluated against design peak flows and any undersized pipe to be replaced.
  - 14.1.2. Replace flow meters.
  - 14.1.3. All exposed yard piping and valves which are not stainless steel to be blasted and re-painted.
  - 14.1.4. Develop piping plans based upon selected equipment.



- 14.1.5. Replace blower piping below ground with 316 stainless schedule 40 welded piping to match above ground piping.
- 14.2 Stormwater improvements and Erosion Control
  - 14.2.1 Develop an overall master drainage concept to comply with stormwater attenuation and treatment requirements of both St. Johns County and the State of Florida for the plant.
  - 14.2.2 Determine the size and location of permanent storm water management ponds and infrastructure necessary to collect, convey, treat, and attenuate stormwater runoff from the plant.
  - 14.2.3 Develop plans to improve drainage throughout the plant.
- 14.3 Replace existing process structure site lighting systems as well as addition of site lighting on entry road – Replacement with full-cutoff LED lighting throughout the site and to specific unit processes.
- 14.4 Provide lightning protection systems for new structures and provide lightning protection for existing structures including UV structure, SBR tanks, digester/equalization tanks and existing headworks. The existing admin building and blower building have existing lightning protection and will tie into existing grounding loop around each structure.
- 14.5 Provide grounding for all new structures and equipment. Based on a site visit it appeared JEA had addressed grounding of existing structures and buildings
- 14.6 Provide the conduits so JEA security: motorize the sliding access gate, install keycard access control system and camera at the access gate.

## 15. Instrumentation and SCADA

- 15.1 The existing effluent facilities PLC used with the process equipment and instruments for the filters, disinfection, effluent monitoring, and effluent pumping will be replaced with a new control panel/PLC.
- 15.2 A JEA approved Instrumentation System Supplier (ISS) will be responsible for providing instrumentation and controls as well as integrating improvements into plant SCADA.
- 15.3 Replace existing main PLC Control panel with 15-inch Siemens HMI, S7-1500 PLC and supporting I/O
- 15.4 Replace reject reclamation pumps control panels in-kind no improvements are required.
- 15.5 Replace effluent pump station control panel in-kind no improvements are required.
- 15.6 All new probes, instrument and controls shall communicate via Profinet > Profibus > 4-20 mA for instruments that provide more than one signal. For simple instruments (pressure) 4-20 mA is sufficient.
- 15.7 Plant SCADA is GE iFix.
- 15.8 Upgrade the plant to fiber optic (need to confirm FO network is available) for communication to the main control room at Ridenour WWTP.
- 15.9 Install new fiber ring connecting all processes on site.

## 16 Resiliency Requirements

- 16.1 Review: Resiliency Surge Flood, Resiliency Electrical, Resiliency On-site Containment and Resiliency Influent Pump Station documents
- 16.2 Summarized and implement resiliency requirements as economically feasible. Present recommendations in the 30% project design report (PDR).

## **SCOPE OF SERVICES**

MM will perform the following tasks to complete final design for the project as defined in this Scope of Services. JEA standards, current to 2024, will be followed. The work associated with these engineering services is separated into the following tasks:

- Task 1 – Project Management and Project Initiation and Kickoff Workshop
- Task 2 – Data Collection, Assessment, Evaluation and Technical Memoranda (TMs)
- Task 3 – 10% Concept Design Documents
- Task 4 – 30% Design Documents and Project Design Report (PDR)
- Task 5 – 60% Design Documents
- Task 6 – 90% Design Documents
- Task 7 – 100% Design Documents and Bid Documents
- Task 8 – Permitting (Limited Amount Not-to-Exceed)
- Task 9 – Bid Phase Services
- Task 10 – Post Design Services (To be negotiated after Bid)
- Task 11 – Update O&M Facility Manual (To be negotiated after Bid)
- Task 12 – Subconsultants
- Task 13 – Unspecified Additional Services

### **Task 1: Project Management, Project Initiation and Kickoff Workshop**

#### **Subtask 1.1: Project Management**

- 1.1.1 Detail scope of services with sub tasks and a work plan with timeline (work schedule).
- 1.1.2 Prepare monthly invoices, updates to cash flow, and submit project progress update.

#### **Subtask 1.2: Project Initiation and Project Kickoff Meeting**

- 1.2.1 A project kickoff meeting (2 hours) will be held between JEA and key team members of Mott MacDonald's project team to discuss the project goals and objectives, scope of the project, challenges or issues, permitting approach, schedule, and communication protocols.
- 1.2.2 Prepare agenda and meeting minutes from the kickoff workshop and distribute to the team.

#### **Subtask 1.3: Meetings**

- 1.3.1 Conduct site visit(s) (Task 2).
- 1.3.2 Conduct Progress Meeting No. 2 (Task 3) to review 10% milestone deliverable.
- 1.3.3 Conduct Progress Meeting No. 3 (Task 4) to review project design report (PDR).
- 1.3.4 Conduct Progress Meeting No. 4 (Task 5) to review 60% design documents,
- 1.3.5 Conduct Progress Meeting No. 5 (Task 6) to review 90% design documents.

### **Task 2 – Data Collection, Assessment and Evaluation including Technical Memoranda (TMs)**

#### **Subtask 2.1: Data Collection, Assessment and Evaluation**

JEA will assist MM in collecting and gathering all the information needed to complete the design for this project. To that end, Mott MacDonald will:

- 2.1.1 Submit data requests to JEA PM and prepare a log tracking receipt of each document. Existing reports may include (geotechnical), as-builts and record drawings, projected demands, and historical DMR data.
- 2.1.2 Collect and review available record drawings
- 2.1.3 Conduct site visit(s)
- 2.1.4 Develop list of questions of concern and/or clarification based on information received and as-builts
- 2.1.5 Define project site runoff condition.

### Subtask 2.2: Technical Memoranda

The following Technical Memoranda (TMs) will be developed under the data collection and assessment phase. These TMs will be used as the basis for the Conceptual Design Documents (CDDs) under Task 3. The following TM list also includes a list of critical decisions that need to be made as part of the evaluations presented therein:

- 2.2.1 TM-1: Flows and Loads – As per JEA Planning an increase in plant flows is not being considered and the design is based on maintaining the permitted plant capacity and peak flow design basis. MM will summarize flows and influent and effluent data (provided by JEA) for the past two years of DMR data. This TM should be completed and accepted by JEA PEC prior to starting the other TMs listed below. Anticipated 2-3 page TM with tables summarizing flows and influent/effluent characteristics. The design excludes chemical addition to meet TN or TP mass loading or advanced treatment limits. Should these need to be considered additional scope and fee will apply.

PV WRF Design Flow/Effluent Criteria

ADF (MGD)	PHF (MGD)	CBOD5 (mg/L)	TSS (mg/L)	DO (mg/L)	TN (mg/L)	TP (mg/L)
0.8	2.0	60	5.0	5.0	3.25	1.41

- 2.2.2 TM-2: Headworks Considerations
  - 1. Existing Huber drum screen to be replaced to match new JEA standard.
  - 2. The design basis is for rehabilitation of the headworks and incorporate two automatic center flow band screen(s). The existing bar rack will be removed for the new screen and the existing screen channel converted to a bar rack.
  - 3. Grit removal is excluded in the evaluation of design.
- 2.2.3 TM-3: Biological SBR Considerations
  - 1. SBR rehabilitation
  - 2. Evaluation of aeration and mixing systems with which to replace current systems.
  - 3. An overall strategy to existing SBR rehabilitation efforts will be considered.
  - 4. Discuss challenges that need to be addressed the rehabilitation efforts.
- 2.2.4 TM- 4: Evaluation of Existing Digester/EQ Tank
  - 1. Calculate digester volume based on anticipated solids
  - 2. Digester rehabilitation
  - 3. Digester aeration/mixing equipment modifications
  - 4. Discuss challenges that need to be addressed the rehabilitation efforts.
- 2.2.5 TM – 5: Blower Evaluation
  - 1. Modification of existing building with new blower
  - 2. New blowers for digesters located outside the building and SBR blowers inside the building.
  - 3. Use of VFDs or inlet throttling valves for blower functions
- 2.2.6 TM- 6: New Equalization Tank
  - 1. Evaluate requirement for low energy mixing.

2. Recommend post-EQ pump station sizing and layout considerations.
- 2.2.7 TM-7: UV Disinfection
1. Evaluate the feasibility of relocating and using the existing UV System at Nassau WRF as well as a new two channel Trojan UV system.
  2. Evaluate only Trojan UV system.

Note that pump selections, hydraulic/process calculations or other calculations will be placed in the project file at this stage. These calculations will be modified as the project progresses and the final calculations for all disciplines will be placed in the project file at the 100% design phase.

### **Task 3: Schematic Design Phase (10 Percent)**

***Subtask 3.1: Schematic Design Document*** – During the schematic design phase, the Mott MacDonald team will focus on defining the project scope, establishing the design criteria for each unit process at the WRF and related facilities, summarize results and direction from the TMs developed in Task 2. The result of this phase will be documentation called the 10 Percent Schematic Design Document (SDD) which meets milestone 1 of the SOW:

1. Summary of design flows and loads that will be used for upgrade and future planning.
2. Results and recommendations for TMs described in Subtask 2.2.
3. Overall aerial site plan (not based on survey data) showing anticipated improvements; survey will be in progress.
4. Identification of major equipment and proposed design criteria for all new process equipment
5. Initial hydraulic profile for AADF and PHF
6. Initial P&IDs and process flow diagram
7. List of anticipated permits
8. Utility Coordination – Evaluation of electrical service entering electrical room and capacity report on existing emergency generator.

### **Task 4: Conceptual Design Phase (30 Percent)**

***Subtask 4.1: Conceptual Design Document*** – Decisions regarding the evaluations and design direction noted above should be made prior to proceeding with the 30 percent. A 30 percent conceptual design document will be developed for the WRF improvements and proposed design criteria for all disciplines will be summarized. The result of this phase will be the documents called the 30 Percent Conceptual Design Document (CDD) that meets milestone 2 and incorporates:

1. Final hydraulic calculations and profile developed for ADF and PHF
2. Detailed development of pumping system curves and pump selections for the post-equalization tank pump station
3. Unit process system description, including the system identification, its function and general description.
4. Unit process component description, including designations and design descriptions and criteria. Within this section, design constraints and equipment sizing criteria are described. For example, design information such as system and pump curves, pump selection, pipe size and pressure class, should be included.
5. Summary of geotechnical investigation and recommended excavation, backfill and dewatering processes. Note the full geotechnical report may not be available at the time the CDD is provided to JEA.
6. Detailed headworks, SBR and post-equalization tank, filtration, UV, in-plant drain and reuse, and digester process plan view drawings and sizing criteria summarized.
7. Updated site plan showing each unit process using survey obtained during design.
8. Proposed yard piping and connections to existing utilities.
9. Summary of stormwater improvements and other civil site requirements

10. Electrical single line diagrams
11. Confirmation that generator sizing is sufficient for upgrades.
12. Summary of Beach Electric discussions and incoming transformer sizing
13. Initial construction sequencing description and limitations (will require JEA operator input)
14. Proposed P&IDs and process flow diagram and should include the following:
  - a. Complete interconnection of process equipment, automation and instrumentation used to control, measure, protect, view, and document the process.
  - b. Use JEA P&ID standards.
  - c. Follow JEA Standardize Symbols as indicated on the Standard drawing "INSTRUMENTATION AND CONTROL LEGEND".
  - d. Document all process piping with sizes and loop identification as defined on the "INSTRUMENTATION AND CONTROL LEGEND"
  - e. Indicate all mechanical equipment, including all mechanical and electrical/control connections as well as identification labels.
  - f. Valves including all electrical/control connections as may be required and identifications labels.
  - g. Flow direction
  - h. Include all automation, instrumentation, and control panels as well as the type of connections, locations and identification using JEA's "INSTRUMENTATION AND CONTROL LEGEND"
  - i. Identification of equipment by others
  - j. Miscellaneous – vents, drains, special fittings
15. List of proposed specifications.
16. JEA's Water and Sewer Standards itemized.
17. Updated Class 3 opinion of probable construction cost (OPCC) with report and variance from Project Scope Statement (PSS) estimate. Estimates should be laid out by structure.
18. Project design schedule and estimated construction duration

**Task 5: 60 Percent Final Design**

***Subtask 5.1: 60 Percent Design Development*** – Upon approval of the CDD, Mott MacDonald will proceed immediately into the final design stage. A preliminary list of the anticipated drawings (for informational purposes) is provided in **Exhibit A**.

1. Prepare and submit 60% submittal of the Contract Bid Documents that meets all the goals listed under milestone 3. Incorporate JEA's PDR (30% submittal) comments. 60% Submittal should also include:
  - a. Demolition phasing and construction sequencing including a paragraph in the Summary of Work specification outlining the construction rehabilitation approach.
  - b. Schedules (i.e. piping, fitting, valves, gates, pumps, blowers, any other equipment)
  - c. Bid form. Define what items should be bid as unit price items. Create measurement and payment descriptions for those items not covered in JEA's W&WW Standards Manual.
2. Review and edit JEA's Division 0 (front-end) specifications as required to accommodate the Contract Bid Documents. Integrate the bid form into Division 0.
3. Update and present the utility conflict matrix
4. Prepare and submit AACE Class 2 opinion of cost. List the quantities. Indicate construction timeline.

5. Prepare VC table from the 30% overall project budget (OPB).
6. Conduct 60% submittal review meeting. JEA is to provide written comments and drawing markups to the EOR.
7. Prepare and submit meeting minutes. Minutes shall include review comments and responses.

**Task 6: 90 Percent Final Design**

***Subtask 6.1: 90 Percent Design Development*** – Mott MacDonald will provide an updated review set of drawings and specifications at the 90 percent.

1. Prepare and submit 90% submittal of the Contract Bid Documents. Incorporate JEA's 60% submittal comments.
2. Update and present the utility conflict matrix
3. Draft and submit the bid form in accordance with JEA's Front End Document and Water & Wastewater Standards Manual.
4. Prepare and submit AACE Class 1 estimate. List the quantities. Refine construction timeline.
5. Prepare VC table from the 60% overall project budget (OPB).
6. Submit design drawing for JEA to prepare the Equipment Attribute Table (EAM).
7. Conduct 90% submittal review meeting. JEA is to provide written comments and drawing markups to the EOR.
8. Prepare and submit meeting minutes. Minutes shall include review comments and responses.

**Task 7: 100 Percent (Bid Set) Design Development**

***Subtask 7.1: 100 Percent (Bid Set) Design Development*** – Upon approval of the 90 percent drawings, Mott MacDonald will finalize any remaining outstanding items and prepare the bid sets.

1. Prepare and submit 100 Percent Final Design Document the following:
  - a. Update and submit the PDR
  - b. Final updated contract documents
  - c. Final utility conflict matrix
  - d. Final opinion of probable construction cost, Class 1. List quantities
  - e. Final Cost Variance tables in OWNER's template and format
  - f. Final bid form (OPCC and bid form shall compliment/supplement each other). The EOR submit a populated bid form. The bid form will include unit price bid items for the anticipated concrete repair work at the headworks, SBRs, and digester structures.
  - g. Submit design drawing that track and highlights the changes from 90% to 100% drawings for JEA to prepare the Equipment Attribute Table (EAM).
  - h. Final SUE investigation report and survey
  - i. Final design calculations
    1. Final hydraulic profile
  - j. Final permits as available
2. Prepare Issued for Bid Contract Documents in electronic form for OWNER procurement following the completion of the 100 Percent Final Design Document submittal. Incorporate supplemental permitting comments received from the permitting agencies.

**Task 8: Permitting (Hourly Basis, Not-to-Exceed)**

Mott MacDonald will prepare the necessary permit applications, if applicable, exhibits, drawings, and specifications and submit the following permits. Mott MacDonald has included time to respond to one Request for Additional Information (RAI) from each agency as well as one pre-application meeting with each agency.

1. SJC DRC
2. FDEP Minor Modification
3. FDEP ERP permit
4. FM Global – letter noting that FM Global does not apply due to building being until \$2M.

**Subtask 8.1: SJC DRC:** Mott MacDonald will submit a SJC DRC permit application for the site. Necessary stormwater calculations will be required.

**Subtask 8.2: FDEP Minor Modification:** Mott MacDonald will prepare a minor modification to the Ponte Vedra WRF permit for the rehabilitation efforts. No increase in plant WRF capacity.

**Subtask 8.3 ERP Permit:** Prepare ERP permit for submission. The responsibility to develop the necessary stormwater pollution prevention plan and to submit the Notice of Intent to Use NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities (NPDES permit) shall be delegated to the Contractor.

**Subtask 8.4: FM Global:** Mott MacDonald will submit a letter to FM Global noting they will not be required to obtain this permit as the proposed building is less than \$2M in cost.

**Subtask 8.5: Permitting Fee Allowance:** Included in the cost of this task is a \$25,000 allowance for Mott MacDonald to submit permitting fees on behalf of JEA for the above noted permits.

### **Task 9: Bid Phase Services**

Mott MacDonald will assist during the bid process with the following:

- 9.1: Attend the pre-bid conference.
- 9.2: Prepare and submit addenda to JEA.
- 9.3: Revise contract bid documents per addenda.
- 9.4: Fill in the bid form (it shall match the const listed in the OPCC) for JEA prepares the bid tabulation.
- 9.5: Prepare and issue Conformed Construction Documents.

### **Task 10: Post Design Services (To be negotiated after Bid)**

#### ***Subtask 10.1: Pre-Construction Meeting***

1. Project manager will attend on-site pre-construction meeting.
2. Draft and submit meeting minutes for review.
3. Submit final meeting minutes.

#### ***Subtask 10.2: Construction Progress Meetings***

1. Project Manager will attend on-site construction progress meetings if requested by JEA. Not to exceed X progress meetings.

#### ***Subtask 10.3: Review Shop Drawings***

1. Receive, review, evaluate, and distribute shop drawings within 21 calendar business days of receipt of the shop drawings. Expected number of shop drawings XX.

#### ***Subtask 10.4: O&M Manuals***

1. Receive, review, evaluate, and distribute O&M manuals within 21 calendar business days of receipt of the shop drawings. Expected number of manuals XX.

#### ***Subtask 10.5: Requests for Information (RFI)***

1. Receive, review, and evaluate RFIs. Submit RFI response to JEA Construction Administrator. Expected number of RFIs XX.

#### ***Subtask 10.6: Change Order***

1. Review Contractor's change order request if required by JEA. Expected number of Change Orders is X.

#### ***Subtask 10.7: On Site Start-up and Performance Testing (if requested by JEA)***

1. Review the submitted test plans and test reports from the suppliers for the equipment testing, and review the certified performance testing results submittals. EOR provide a test plan for the plant.
2. The Project Manager or Project Engineer will attend the performance testing. If necessary, the process/mechanical or electrical/instrumentation engineer will be contacted by phone.

**Subtask 10.8: Substantial Completion Walk-Through if required by JEA**

1. Project Manager to conduct a walk through to visually assess the project completion.
2. Instrumentation and Electrical engineers of record to conduct a walk through to assess the project completion.
3. Create a punch list.

**Subtask 10.9: Final Walk-Through if required by JEA**

1. Project Manager will conduct the final walk through to confirm and verify the completion of the punch list.
2. Instrumentation and Electrical engineers of record will conduct the final walk through to confirm and verify the completion of the punch list.

**Subtask 10.10: Construction Record Drawings**

1. Review the Contractor's as built and record drawings at the end of construction.
2. Produce and submit construction record drawings electronically for JEA review.
3. Incorporate JEA review comments and submit final construction record drawings.

**Subtask 10.11: Asset Management**

1. At the end of the construction, review and approve the contractor's asset management table for JEA review.

**Subtask 10.12: Project Certification**

1. FDEP

**Task 11 – Update O&M Facility Manual (To be negotiated after Bid)**

**Subtask 11.1: Provide an Overall Facility's O&M Manual**

1. Supplemental Figures – develop selected renderings comprising the information from engineering drawings and other modified data to provide a more complete picture of a particular technical component of the project. Provide means for the operators to quickly locate and identify details without having to review non-essential information. Figures shall be either letter (8.5 inches by 11 inches) oriented in landscape or portrait layout or tabloid landscape (11 inches high by 17 inches wide).
2. Informational Photographs – include color photographs in the operations manual update for clarifying the operation for the bar screen, clarifiers and magnetic meter. Photographs and text in the manual will use letter size paper (8.5 inches by 11 inches).

**Subtask 11.2: Draft Operations Manual Update** – submit the first draft of the operations manual supplement in format prior to the Contractor's project Substantial Completion milestone for JEA review and comments.

**Subtask 11.3: Field Verifications of Draft Operations Manual Update** – revise the Draft Operations Manual Update to include applicable JEA comments and submit to JEA within approximately 60 calendar days after project Substantial Completion.

1. Field verify as built conditions prior to finalizing the operations manual update.
2. Update figures and photographs to account for the Contractor's completed work.

**Subtask 11.4: Final Operations Manual Update** – incorporate comments from the Field Verified Operations Manual Update and issue the Final Operations Manual Update to JEA.



### **Task 12 – Subconsultants**

**Subtask 12.1: Site Survey and SUE** – Mott MacDonald’s Jacksonville Small Emerging Business (JSEB) subconsultant shall perform the site survey of the entire site at the Ponte Vedra WRF.

1. The site survey will include horizontal and vertical control, property limits, topographic features, survey boring locations, existing utility locations (with sewer and stormwater manhole depths), all trees (size and speciation) larger than 2-inch in diameter, and down-gradient storm water facilities.
2. A total of 45 soft digs are included.
3. Based on a review of the National Wetlands Inventory, wetlands are not anticipated on the site and have not been included in the scope of work.

**Subtask 12.2: Geotechnical Investigations** – Mott MacDonald’s JSEB subconsultant shall perform geotechnical investigations of the existing Ponte Vedra WRF site.

1. A total of 19 borings and one pavement core will be required on the project sites: 8 SPTs for the new SBR and post EQ tank (1 to 80 feet at the center of the tank and 3 to 50 feet on exterior of the tank location) and 5 SPTs for other buildings and structures (20 feet), 4 SPTs (10 feet) for miscellaneous yard piping or site, 2 SPTs for the existing asphalt driveway (6 feet), and one pavement core of the existing plant perimeter road (5 feet).
2. MAE will locate existing underground utilities at the site by utilizing Sunshine State One-Call system. In addition MAE will use a third party to perform GPR to locate underground utilities in the area of soil borings. Once the SPT borings are completed, they will be backfilled with a cement grout. The recovered soil samples will be described in the field by the field crew. The field logs and samples will be delivered to the subconsultant’s laboratory where the logs will be reviewed, and the samples classified by a geotechnical engineer.
  - a. Laboratory classification and index property tests will be performed as necessary on selected soil samples to confirm the soil classification and provide engineering characteristics to estimate compressibility and foundation recommendations.
  - b. The subconsultant will perform an analysis of the contaminated sites within 500 feet of the project area. If none are found, based on this information JEA will submit a Letter of Intent (LOI) to dewater under the generic permit. If contaminated sites are identified, a specific plan will be developed and submitted to JEA for action and approval.
  - c. The JSEB’s geotechnical engineer, licensed in the State of Florida, will direct the geotechnical exploration, review all boring logs and soil data information, and provide an engineering evaluation, and issue a draft and final report. This report shall be incorporated into the design documents.

### **Task 13 – Unspecified Additional Services**

An allowance of \$150,000 is provided for unspecified additional services that can be used throughout the project duration for changes to the contract at the direction of JEA. If changes are required, Mott MacDonald will notify JEA and prepare a summary of the scope and fee requests for approval prior to beginning work. Any agreed to upon changes will be billed from this task and tracked.

### **DELIVERABLES**

1. Draft and final PDR in electronic format (PDF and MS WORD and EXCEL).

2. Drawings: One (1) half size (11" x 17") hard copy to scale and in PDF format for 60%, 90% and 100%
3. Supplemental Specifications: One (1) hard copy and in PDF and WORD format for 60%, 90% and 100%
4. Conformed Construction Documents: Scale Drawings, three (3) half size (11" x 17") and two (2) full size (22" x 34") hard copies signed and sealed and in PDF format. Technical specifications, three (3) signed and sealed hard copies and in PDF format
5. Opinion of Probable Construction Cost and VC (PDF and EXCEL Format) for 30%, 60%, 90% and 100% submittal
6. Construction Record Drawings: One (1) signed and sealed full size (22"x 34") and in PDF and ACAD \*.dwg format.

## SCHEDULE

The proposed schedule for each task is listed below.

<b>Task 1:</b>	Project Management, Project Initiation, Kickoff Workshop	Within 10 days of PO
<b>Task 2:</b>	Data Collection, Assessment and Evaluation Including Technical Memoranda (TMs)	90 days + 3 weeks review
<b>Task 3:</b>	Schematic Design Phase (10 Percent)	60 days + 3 wks.
<b>Task 4:</b>	Conceptual Design Phase (30 Percent)	90 days from SDD approval + 3 wks.
<b>Task 5:</b>	60 Percent Final Design (60, 90, 100 Percent)	210 days from approval of CDD + 3 wks.
<b>Task 6:</b>	90 Percent Final Design	
<b>Task 7:</b>	100 Percent Final Design	
<b>Task 8:</b>	Permitting (NTE)	Concurrent with Tasks 1 – 7
<b>Task 9:</b>	Bid Phase Services	2 Months from bid advertisement
<b>Task 10:</b>	General Services During Construction	TBD
<b>Task 11:</b>	Update O&M Facility Manual (To be negotiated after Bid)	TBD
<b>Task 12:</b>	Subconsultants	
<b>Task 13:</b>	Unspecified Additional Services	Only Use if Authorized by JEA

## FEES

The project will be billed as a lump sum contract with a total fee of \$1,771,227 with the exception of Task 8 which will be a not-to-exceed. Mott MacDonald will provide monthly invoices to JEA based on the percentage of work completed each month. A breakdown of the fees associated with each task is provided in **Exhibit B**.

## ASSUMPTIONS, EXCLUSIONS, AND CLARIFICATIONS

### Design Services

1. Due to the fact that the potential added electrical building will be less than \$2M in value, we have determined that the FM Global requirements do not apply to this project. We will provide a letter to FM Global noting as such.
2. JEA to provide all DMR data for review (flow, loadings, influent and effluent for review. MM will analyze two years of data for use.
3. The plant treatment limit design basis will remain the same, scope and fee to assess the plant meeting advanced wastewater treatment (AWT) limits is not included.
4. Review of zoning requirements etc. have not changed.
5. No improvements related to flood elevations are required.
6. The design does not include changing any of the types of unit processes or evaluation of alternative technologies.
7. Assumes existing chemical feed systems are sufficiently sized and do not require modifications.
8. Use of JEA's design standards for equipment, piping, valves, electrical, I&C.
9. All work related to security (buildings, rooms, and entrance gate) have been excluded from the scope of work. JEA security is performing this work as part of a separate project at the plant.
10. All work related to a new communications tower have been excluded from the scope of work. JEA is pursuing new higher (300 ft) tower but requires approval from SJC along with engineering.
11. No new fencing or landscaping

### Bidding Services

1. Only one bid phase and one set of bidding documents.

### Tasks 10 and 11 (negotiated at a later date)

1. Only one contract package, additional packages or if modification to additional fees will be negotiated.
2. JEA is preparing the asset management spreadsheets in the design phase, Mott MacDonald will review it during design (90%) and in construction along with JEA.

## JEA RESPONSIBILITIES

JEA shall provide timely review of all documents and drawings. JEA will also provide all necessary documentation on existing facilities and operating data. Mott MacDonald looks forward to working with JEA on this very important project. Upon approval of this scope and fee, and issuance of the first purchase order, Mott MacDonald will begin working immediately. Should you have any please contact me at 704-249-6592.

Very truly yours,  
Mott MacDonald



Leslie S. Samel, PE  
Vice President

cc: File

